

A monthly update covering people, events, research, and key developments

Editor's Note:

This month, we have notes for you from the SER mid-year meeting along with a group of interesting notes from the field. We've also taken the opportunity to revisit, a decade later, the ethics discussion that ensued after Berkeley's Dean Buffler was determined to have industry affiliations that conflicted with her research work.

Please note the call for abstracts for WCE 2024 in Cape Town, South Africa next September!

We continue to provide you with our popular monthly crossword feature, Notes on People, an overview of what we read from the public media, and a listing of upcoming epidemiology events. Finally, don't miss the Job Bank offerings this month. We have some fantastic opportunities advertised both here and on our website.

Did you miss last month's issue? Read it here: http://tinyurl.com/y5uj586d

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Society for Epidemiologic Research Mid-Year Meeting Notes: Innovative Data Science Applications in Epidemiology

Author: Madeline Roberts, PhD, MPH

The SER Mid-Year Meeting was held March 4-8 in Toronto, Ontario. Innovative Data Science Applications in Epidemiology was the theme of this year's mid-year meeting. As data science advances, methodology from that field is increasingly utilized within epidemiology. As such, this meeting discussed some of the latest artificial intelligence (AI) developments as they pertain to epidemiology. The papers referenced throughout the conference were of great interest, and truly are at the vanguard of what is happening at the intersection of data science and public health. Several of these are linked throughout this article, and they are well worth reading.

One of the overarching themes that surfaced is that a key challenge in Al approaches is to clearly identify and understand the problem you are trying to solve. Other challenges include sourcing/curating data that can extract useful signals, and selecting the appropriate tools, techniques, and frameworks to analyze those signals.

Dr. Alejandro Berlin gave a fantastic talk titled "Harnessing the Power of Al in Cancer Research: From Code to Clinic." Dr. Berlin emphasized that significant effort needs to go into the not-very-glamorous work of thinking about, constructing, curating, and stewarding data assets. Throughout his talk he returned to the theme of the need for technology to be human-centered, the key question being "How are we improving care for patients?" He emphasized that to keep the focus human-centered, researchers need to clearly identify what problem(s) they are trying to solve and

who is going to see the benefit of this technology. The aim is not what elaborate, impressive things we can do with the technology, rather, how are we demonstrably improving care, and for whom? Dr. Berlin challenged researchers to consider whether we are simply digitizing a process and making it "fancier," or if we are actually moving the bar and improving patient care and patient experience.

Dr. Berlin discussed the importance of differentiating between knowledge (the prediction) and judgment (taking action). Al provides the tools and delivers predictions, humans make judgments and take action, the latter of which is critical in technology evaluation. And he posits that highly curated data is the most essential element of all.

Two note-worthy articles he referenced were one, "Decoding biological age from face photographs using deep learning" by Zalay, et al (a pre-print at the time of this writing). This study developed and validated FaceAge, a deep learning tool that estimates biological age from simple facial photographs. Trained on data from healthy patients and cancer patients, the authors found that, "on average, cancer patients look older than their chronological age, and looking older is correlated with worse overall survival," which was assessed using Kaplan Meier survival analysis. Dr. Berlin touched on the potential ethical implications of this study, such as if insurance companies were to begin using it in association with assigning premiums.

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The second standout article was "All models are wrong and yours are useless: making clinical prediction models impactful for patients" by Florian Markowetz, which is both as fun and as informative to read as it sounds.

Dr. Irene Chen delivered an outstanding keynote speech on Artificial Intelligence and Health Disparities. She began by discussing audits performed on algorithms used in healthcare are increasingly providing evidence of bias. Some reasons for this include: (1) healthcare in its current form has existing health disparities, so data that reflects disparities is generated and then fed into algorithms, and (2) genome wide association studies (GWAS) are not reflective of the global population (96% of GWAS participants are of European descent). She gave the example of dermatology algorithms trained on fair-skinned patients, which demonstrate poorer performance on dark-skinned patients, and one way to correct this is to augment existing data sets with darker skin images (study: Disparities in dermatology AI performance on a diverse, curated clinical image set by Daneshjou et al). Thus, if the training dataset is not representative, we should look for ways to amend this to achieve better and more equitable performance.

Dr. Chen's research focuses on what she calls the "ethical Al pipeline for medicine" (you can find a figure of the pipeline here). She discussed how bias is entering into each step along the way, and that researchers must consider how to make the data collection process more equitable and consider elements such as power dynamics, representation, who consents for data collection, and which studies are ultimately funded. She referenced "biased systems and biased datasets create algorithmic bias."

Dr. Chen concluded that equity problems are both societal and computational in nature and both of these facets need to be addressed.

Some of Dr. Chen's other research is on patient-centered reasons for treatment switching which utilizes large language models (LLMs),

Clustering Interval-Censored Time-Series for Disease Phenotyping, and Ethical Machine Learning in Health Care, the latter of which addresses some of the social justice aspects of machine learning.

The 2024 SER Annual Meeting will be held June 18-21 in Austin, Texas. More information can be found here, including accommodations and submissions. We hope to see you there!

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Highlights and Footnotes from the Field: Richard Doll Prize Awarded; Disaster Readiness; Public Health Week 2024 Kicks Off

Author: Madeline Roberts, PhD, MPH

Dr. Deborah Lawlor is the First Woman Awardee of the Richard Doll Prize

The International Epidemiological Association (IEA) <u>awarded Dr. Deborah Lawlor the 2024 Richard Doll Prize</u>. The Association's highest honor, the Richard Doll Prize is named after a British physician and epidemiologist whose pioneering contributions to the field included linking smoking to deleterious health outcomes and characterizing the relationship between asbestos and lung cancer. The IEA established the Richard Doll Prize in 2007 and awards it every three years to an epidemiologist who has "advanced our understanding of the determinants of a disease of importance for health in populations through a body of research," often over a series of studies. This year is the first time this honor has been given to a woman epidemiologist.

Dr. Lawlor's work centers on perinatal and reproductive health, and she has also made pivotal contributions in triangulation of evidence to improve causal inference. She co-authored "Triangulation in Aetiological Epidemiology," an article which effectively defined triangulation of evidence as "The practice of strengthening causal inferences by integrating results from several different approaches, where each approach has different (and assumed to be largely unrelated) key sources of potential bias." Within reproductive and perinatal research, randomized control trials are often not possible, which makes triangulation of evidence critically important. Her research in Artificial Reproductive Technology has helped to identify the optimal number of embryos for transfer in women of differing age groups (i.e., under vs. over 40 years of age). Dr. Lawlor's achievements will be honored in the opening session of the World Congress of Epidemiology, to be held September 24-27, 2024 in Cape Town, South Africa.

National Public Health Week and The Invisible Shield Docu-Series

National Public Health Week kicks off April 1, and in that spirit, one of the things we're looking forward to is watching The Invisible Shield. This four-part documentary (streaming March 26 on PBS) looks at the history, purpose, scope, and future of public health. It addresses the public health achievements we have come to take for granted, and discusses how under typical circumstances public health functions unseen, and how that invisibility was lost, perhaps indefinitely, during the pandemic. The documentary also covers the outdated American public health system which is in need of repair, how the erosion of public trust compromises the effectiveness of public health, and how after years of progress we are beginning to see a decline in life expectancy.

"Ready or Not" Public Health Preparedness Report Released

In mid-March, Trust for America's Health (TFAH) released their report "Ready or Not: Protecting the Public's Health from Diseases, Disasters, and Bioterrorism," which gauges preparedness and strength of public health systems. TFAH was founded in 2001 to be a "nonprofit, nonpartisan public health policy, research, and advocacy organization that promotes optimal health for every person and community and makes the prevention of illness and injury a national priority." This is the 21st edition of "Ready or Not," one of their annual publications since 2002. TFAH aims to track indicators over several years for consistency, primarily based on National Health Security Preparedness Index (NHSPI) measures as well as state public health funding trends external to the NHSPI.

The evaluation criteria for "Ready or Not" include nine indicators (nurse licensure compact; accreditation (indicators 2 and 3); public health funding; community water system safety; access to paid time off; flu vaccination rate; patient safety in hospitals; public health laboratory surge capacity). Performance in these indicators led to three readiness levels (high, middle, and low). The District of Columbia and 21 states including Colorado, Kansas, and Tennessee were scored in the high-performance tier. Thirteen states scored in the middle-performance tier, and 16 states in the low-performance tier including California, Kentucky, and Texas.

Some points of interest included the following:

- Public health funding increased or remained stable in 37 states.
- All but four states (California, Missouri, Utah and Virginia) have written plans for six- to eightweek lab-testing surge capacity in response to an outbreak or public health emergency.
- The report found just 25% of US hospitals received an average "A" grade for patient safety, meaning these facilities are well-prepared in measures like intensive care capacity, prevention of hospital-acquired infections, error prevention, and their ability to navigate public health emergencies.
- The report also included a special feature on extreme heat health impacts and higher risks for specific sub-populations such as pregnant people, the elderly, and those living in public housing.

In light of findings, the report outlines seven priority areas for policy action at the federal, state, local, and territorial levels: (1) stable and sufficient funding for public health security; (2) effective leadership and coordination; (3) prevention and response to outbreaks and pandemics; (4) resilient communities and health equity in preparedness; (5) accelerate development and distribution of medical countermeasures; (6) healthcare system response and recovery; (7) prepare for environmental threats and extreme weather.

Plague and Measles

In early March, New Mexico reported a <u>death from plague</u>. The <u>U.S. annual average</u> is seven cases of plague, with a range of 1 to 17. The two regions most commonly reporting plague cases are in the southwest (Northern New Mexico, northern Arizona, and southern Colorado) and the west (California, southern Oregon, and far western Nevada).

Thus far in 2024 we've had 64 measles cases reported across 17 states from California to Florida. As reference points, in all of 2023 there were 58 cases, and in all of 2022 there were 121 cases.

On the Lighter Side...

We'd like to leave you with this meme from the fantastic Johns Hopkins School of Public Health Instagram account, which we have been greatly enjoying.



Source: @johnshopkinssph Instagram account

Captioned: "Here for the Victorian Era memes, not the Victorian Era diseases? Unfortunately, the latter have cropping back up recently..."

The Epi Wayback Machine - Articles From Our Archives

January 2014

Exclusive Interview: A Conversation With David Heath

Award-Winning Investigative Reporter Of The Detailed Article Documenting Ties Between Dean Pat Buffler And Industry

[Editor's Note: A decade ago the epidemiologists worldwide were mired in a discussion of ethics in the wake of a public investigative report into the actions of the late Dean Patricia Buffler of the University of California – Berkeley. The EpiMonitor was able to exclusively interview the investigative reporter who wrote the original article that triggered the reflection within the epidemiology community. We felt it appropriate to revisit the incident to see what we've learned over the last decade and what has changed.

A copy of the investigative report can be read **HERE**.

A surprising report for many epidemiologists about the University of California Berkeley's late Pat Buffler appeared in December 2013 on the website of the Center for Public Integrity. Entitled "Public Health Researcher Also Worked for Industry, Revealing Entanglements of Science", the detailed report presented evidence of multiple relationships Pat Buffler had with industry and of contributions she made in various settings which appeared to be conflicts of interest. Since many colleagues reading or learning about these allegations were shocked, and some raised questions about the motives and qualifications of David Heath, the reporter who conducted the investigation, we interviewed him to dig further behind the story. Below is the exclusive interview given to the editor of The Epidemiology Monitor.

Epi Monitor: Can you tell us a bit about your background as a journalist and your work at the Center for Public Integrity?

Heath: I've spent most of my career working for newspapers in Seattle, St. Louis and Louisville.

For the past 21 years, I've done investigative reporting exclusively. While at the Seattle Times I coauthored an investigation into researchers who had financial stakes in deadly experiments at the Fred Hutchinson Cancer Research Center. That series won many national awards including Harvard University's Goldsmith Award. It was also a finalist for the Pulitzer Prize in 2002. I also coauthored a series exposing medical researchers who were paid to divulge secrets about ongoing drug trials to elite Wall Street investors. In recent years, the Justice Department has started prosecuting people engaged in this practice.

In 2009, I joined the Huffington Post Investigative Fund which later merged into the Center for Public Integrity, a nonprofit investigative unit that collaborates with major news outlets. I worked with PBS Frontline on a program on questionable dental practices at corporate chains. Last year, I produced two segments for PBS NewsHour on corporate

-Buffler cont'd from page 7

influence over the EPA's efforts to evaluate hexavalent chromium.

Epi Monitor: How did you come to do this article? What were the triggers?

Heath: It's a long story, but the short version is that as I was researching corporate influence on environmental science, I kept coming across Patricia Buffler's work. A colleague of mine was having the same experience. Finally, we realized that she was on the board of directors of FMC Corp. while she was dean of UC Berkeley's School of Public Health. It seemed worth looking into.

Epi Monitor: Some I have spoken with say

everyone has an agenda, and they have questioned what your agenda may have been in choosing to investigate Pat Buffler and in reporting what you reported. They wonder if this agenda influenced your investigation and findings. What is your reaction to these views?

Heath: The Center for Public Integrity is a nonpartisan news organization that operates no differently than most newspapers with investigative teams. Our mission, as with any investigative reporting, is to expose abuses and wrongdoing as a way to curb them.

I have been working on a series of stories about

- Buffler cont'd on page 9

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about academics on an IRIS peer review panel who, unknown to the EPA, had conflicts of interest. One was hired by PG&E on chromium VI matters while actually serving on the panel reviewing chromium VI. Another had been a litigation witness for industry in seven chromium VI lawsuits. The EPA left it up to a private contractor to select and vet the panelists. After my report appeared on PBS NewsHour, the EPA changed its rules for selecting peer-review panels.

Epi Monitor: The investigation seems to be very exhaustive involving many persons and documents. How long did it take you to do this work?

Heath: I worked on the story for approximately six months. Patricia Buffler died in the middle of my research.

Epi Monitor: You have mentioned Pat Buffler's memorial. What strong impressions did you get from her memorial service?

Heath: It was clear from the memorial that many of Pat Buffler's colleagues and students were heart broken by her death. So many people used the same words to describe her, such as: generous, warm, charming and elegant.

Epi Monitor: What did you learn about her contributions to public health that seemed most impressive to you?

Heath: I was impressed that she criticized the Food and Drug Administration for delays that may have cost hundreds of children their lives. It dealt with delays in putting Reye's syndrome warning labels on aspirin bottles.

Epi Monitor: Do you think that behavior reveals a courage she had to speak her honest opinion,

at least in some difficult circumstances?

Heath: Of course. But I think all scientific opinions should be honest.

Epi Monitor: I understand from colleagues that they have no reason to believe that her research work for NIH was impacted in any way by her relationships with industry. Do you agree from what you know?

Heath: I suspect that's what scientists always say when they have a conflict of interest. Yet research shows that financial conflicts produce more favorable results for the companies involved.

Epi Monitor: What do you consider to be your most well-documented findings about Pat Buffler's work with industry which violated established rules of ethical conduct or went against standards of good professional conduct?

Heath: Well, I spent months on this story and did a lot of interesting research that didn't make it into the story. I limited my article to the most well-documented and easiest to explain examples. The article links to many of the original documents cited.

A lot of sources were shocked to learn about Buffler's role at FMC Corp. She served on the board for 17 years, doing research on pesticides and herbicides that could affect the \$2 million worth of stock she owned in the company. Yet she never disclosed that relationship when applying for grants or publishing her research. I quote Sheldon Krimsky, a Tufts University expert in conflicts of interest, calling it "the worst case of conflict of interest I've seen in years."

Epi Monitor: You mentioned some ideas you might have about how and why the violations you reported on were carried out. What appears to be the most plausible explanation(s) for any violations she may have made?

Heath: Unfortunately, I never had a chance to talk to Patricia Buffler to get her explanation. So I don't know what she thought or what motivated her.

Epi Monitor: Do you believe there are different or equally plausible explanations for your findings? Or do you believe there is one best convincing explanation?

Heath: Perhaps what you are really asking is if it's possible that the scientific opinions Buffler gave on behalf of industry were genuine and sincere. I suspect that she would say that they were. On the other hand, I interviewed scientists who viewed some of Buffler's work as indefensible. I don't know how many scientists would say that lead-based paint doesn't pose a risk to children. Some of the criticisms I heard were more harsh than the article reflects.

Epi Monitor: As you know, another prominent epidemiologist in France has recently been the subject of an article in Le Monde describing potential conflicts of interest in working for industry. Epidemiologists are concerned about what these episodes reveal and what to do about them.

Assuming that your findings about Pat Buffler of questionable or unacceptable behavior are true, what remedies do you think might work to prevent or lessen this behavior in the future?

Heath: If I were to be completely frank, I don't think the scientific community has ever come to terms with the problem of conflicts of interest.

I have always sensed an attitude that scientists believe that they cannot be corrupted by money. It's just not true.

There has been research showing that even when drug companies give doctors small freebies, it has an influence on their behavior. The prevailing theory is that conflicts can be managed, but I don't see much evidence to back this up. I suspect that this approach to handling conflicts is itself influenced by money. Working for industry can be quite lucrative.

Universities also play a critical role here. Most research schools encourage faculty to consult for industry, which can have the natural effect of downplaying or even overlooking conflicts.

Certainly at a minimum there has to be disclosure. And I think it's fair to give research by scientists with conflicts less weight than other research. Think how seriously you would take the work of a journalist who was paid by the subjects he wrote about.

Epi Monitor: You said that some of your sources predicted that you would receive a lot of negative feedback about your report, but so far have not received a single one. You have received a lot of responses expressing surprise about the findings. Were the potential conflicts extremely well hidden or disguised? If not, what do you think accounts for all the surprise and shock?

Heath: As I began looking into scientists who work for industry, her name kept coming up. I did an earlier story about an epidemiologist working for the state of California who was on a sort of crusade to debunk the allegations in the film Erin Brockovich. Without getting into the

-Buffler cont'd from page 10

details, Buffler crossed paths with this scientist while working for Lockheed Martin in a toxic tort case. I read her deposition and saw that her involvement with industry was quite extensive and some of that work seemed questionable.

Her early CVs included a long list of consulting work for industry. I couldn't imagine that her work with FMC Corp. was a secret to her colleagues. I always wondered why those who knew her best didn't seem to question these relationships. I suspect it was because she was so well liked and respected. Once I started talking to people who knew a lot about Buffler's work for industry, I heard lots of complaints.

health scientists at Berkeley or elsewhere for similar violations?

Heath: Yes, I'm continuing to investigate other examples.

Epi Monitor: Are any of your additional reports in the works focused on Pat Buffler?

Heath: Not at the moment.

Epi Monitor: Thank you for your candor in responding to our questions. If readers respond, I hope you will continue to be available to comment on what our readers think.

Epi Monitor: Are you investigating other public

Original Report: Public Health Researcher Also Worked For Industry, Revealing Entanglements Of Science

"BERKELEY, Calif. — At a memorial service held last month in her favorite classroom, Patricia Buffler was hailed as a champion of children.

While dean of the School of Public Health at the University of California, Berkeley, Buffler started the nation's largest program researching the causes of childhood leukemia. She expanded her study of this rare disease after stepping down as dean in 1998, continuing the work until she died unexpectedly in late September at the age of 75.

Buffler's research, backed by more than \$35 million in federal grants, could save lives. Her team <u>concluded</u> that sending your child to daycare might reduce the risk of getting leukemia, perhaps by bolstering the immune system. It <u>found</u> strong evidence suggesting that preschoolers should stay away from wet paint. One of her graduate students at the memorial was struck by something Buffler once said: "Children are fragile, so it is our role to protect them."

Yet now some of her peers are torn to learn that, in the past three years, Buffler was paid more than \$360,000 to work as an expert witness on behalf of companies that used to sell lead-based paint. Ten California communities, including the county where Buffler lived, this week won a \$1.1 billion judgment against the companies. The money will be used to remove lead paint from older homes. Even minute amounts of lead in a child's blood can cause permanent brain damage...."

Full original article: https://tinyurl.com/msk96hvn

From Our Archives - March 2014

Senior Epidemiologist Defends The Late Pat Buffler And His Own Work In Private Practice

Commentary by Robert Morgan, MD

"The earth is not flat, the earth is not round, the earth is crooked." While that may describe the sorry state of the world, it is up to all of us to make that world less crooked and more fair. The series of articles in the recent EpiMonitor correctly shone a light on some of the unfairness of the Heath Report in the Pat Buffler matter. Full disclosure: I was Pat's friend for almost 40 years. The Heath report hardly ranks as investigative journalism. Rather, it is a slanted review of part of the life of a distinguished academician. In his interview, Heath is reported to have said, "Our mission, as with any investigative reporting, is to expose abuses and wrongdoing as a way to curb them." So what abuse or wrongdoing is he reporting?

Buffler Membership

Heath implies that Buffler's membership on the FMC Board of Directors was a shocking and secret conflict of interest. As a public company, FMC annually publishes the names of the Directors, their compensation, and their stock ownership position. Hardly secret, hardly shocking that Pat's name appeared every year of her membership. And as to disclosing that Board membership on publications and grant applications, that would be appropriate only if the topic related to FMC or its products. It is also possible that if she

disclosed a possible conflict, the journal did not publish it. That has happened to me twice (including the New England Journal of Medicine). Did Heath read all her grant applications to support his claim that she never disclosed her FMC relationship?

Criticism in Science

Heath is very critical of Buffler for taking money to critique other scientist's work. A good scientist welcomes critical review and doesn't worry about who funded the criticism. In science, the quality of the data and the validity of the criticisms are more important than authorship or funding. The best mechanism for truth in science is peer review. Dr. Buffler's papers were subjected to the same peer review process as other submissions. Was there any peer review for the Heath report? Although he criticizes her funding, did he point out that his funding comes from an organization whose Board of Directors is chaired by a famous plaintiff's lawyer?

Scientists and Industry

The University of California has effectively answered many of Heath's allegations concerning funding. I agree with their policies and there is no suggestion that she violated any of the rules. Industry has a responsibility to produce safe products and ensure the health of workers, consumers, and the community. One of the ways they can exercise that responsibility is by grants and contracts to the best and

brightest academic scientists. The suggestion that scientists are being bought by industry money is grossly unfair to most persons receiving grants or contracts from industry. That suggestion is also a favorite allegation of plaintiffs' lawyers when faced with peer-reviewed industry-funded science that weakens or refutes plaintiffs' claims.

Private Practice

Relevant to the discussion of industry funding is my article of 1982 in the Epidemiology Monitor (June 1982, Vol 3 Number 6 available online) for a discussion of what I have termed the private practice of epidemiology. I have spent over forty years doing research with industry funding. Like the University of California, we retained all original data in the event that any other competent scientist wished to reanalyze it. Our policies were always clear: we (not the client) designed the studies; we (not the client) decided on publication; we always disclosed funding sources in our research publications; clients did not have the right to edit any of our publications. We submitted our work to peerreviewed journals. Yet even so, one paper sent to the American Journal of Public Health was rejected outright (without peer review) because the Editor at the time told us he would not publish a negative study funded by industry. Another twist to the well-recognized and continuing problem of publication bias in science.

Outside Consulting

Likely, most academic epidemiologists do some outside consulting. That practice needs no defending. Sometime the consulting is stimulated by litigation or fear of litigation. Both plaintiffs and defendants use experts and both

sides pay well. Sometimes, the consulting activity addresses concern over product safety, worker safety, or community health. Is it wrong for corporations to hire the best possible expertise to address these issues? Is it wrong for a company to place an academic with community health and safety expertise on the Board of Directors?

Government research funds are scarce and tough to get. Industry money is available, and should be used. Corporations have a responsibility to examine the safety of their products, the health of their workers, and their health effects (if any) on the community. Academics and non-academics (like me) should use those funds for research. Heath's apparent thesis is that industry should not fund health research. Does he really wish to remove a major source of funds in a time of federal cutbacks? Who would make up the shortfall in funds?

Funding Source

The Heath report says that, "Buffler co-authored 15 articles in scientific journals paid for by companies or industry groups...." His sentence is amibiguous. Did the companies pay the journals? Did they pay Buffler to write the articles? Or did they pay for the research that went into the articles? Only Pat Buffler can answer the questions and she is not here. I suspect the research was funded by industry but Pat wrote the articles on her own time, as I would. And what difference does funding make? Scientific studies should be judged by the research design, data, and interpretations, not funding. The scientific tradition of peer review and repetition of studies provides at least some safeguards against industry buying the science it wants.

Paid Assassins

If Heath wants to do some real investigative reporting, he should look into the funding of the group of self-proclaimed scientists who do no original work, but criticize those who do, and who accept sizeable fees from attorneys to prepare ammunition against legitimate experts. Many of these persons are nothing more than paid assassins hiding behind several "public interest" organizations or publications. Since I am often an expert witness, I know I am a ready target for character assassination. At least I can defend myself. Pat Buffler cannot. In the long

run, science will have to discern the truth from conflicting articles. Meta-analysis, properly done, may provide one of the methods for settling controversy.

It will be unfortunate if Heath's report discourages scientists from accepting industry grants or contracts out of fear of public attacks on character and credibility. Let science go forward, whatever the funding source, and continue the usual processes of peer review and further studies to confirm or question published findings.

From Our Archives - March 2014

Revelations About Potential Conflicts Of Interest Spur Conversation About Ethical Behavior For Epidemiologists

Are Epidemiologists Truly Independent?

Readers Give Their Quick Takes On Conflicts Of Interest

On The Special Responsibility Of Population Scientists

To the Editor:

"The same principles that apply to clinicians, times 7 billion, ought to apply to population scientists. To clarify further, I assume we can all agree that minimizing conflicts of interest (COIs) for clinicians is so extremely critical for patients so they can feel safe and reassured that they receive the best possible treatment. By extension then, population scientists (whose actions/research affect not one patient at a time, like it is the case with clinicians, but they affect entire populations!) ought to be even clearer on their COIs and in fact, because of the tremendous impact their research may have, it should not be acceptable for them to have any COIs at all (reported or not)."

Eva Schernhammer, MD, DrPH Harvard School of Public Health and Harvard Medical School

On The Influence Of Money In Epi Research

To the Editor:

"Obviously keeping secrets about influences of any sort is bad in itself. But the pervasive underlying problem is that noted in the last paragraphs. My defining image of academic public health was how the discussions of "research" at the faculty meeting of a major SPH (one Prof Buffler herself helped build) consisted of nothing but celebrating grant income and talking about how to get more. There was literally no mention of actual research.

When the mindset is all about celebrating more money, with work being merely a way to get more money, why is it any surprise that the field attracts (or creates) people who follow the money?

But it does not stop there. The dominant money (the grants) are treated as if they have no influence on what research is done and what results are sought, when the diametric opposite is true. When the pervasive attitude is that seeking the overtly and explicitly corrupting money (that which is based on doing particular research that the funder favors and getting the "right" answers) is the goal of the profession, it seems rather hypocritical to get so excited about hidden speculative conflicts of interest that result from relationships."

Carl V. Phillips

Good Science Is Good Business

To the Editor:

"I have worked in industry for years and take my epidemiology very seriously. I have found that in industry good science is good business. It is very important to industry to assure good science is used to evaluate risk from their products and processes. If there is a problem, industry wants to know it first. Likewise, if there is no problem, this needs to be championed."

Jim Collins

Dow Chemical

On Temporality

To the Editor:

"The sine qua non of epidemiologic causation analysis is temporality. Why is there a conflict of interest if a scientist first develops an opinion or approach based on the science and after that an industry asks him/her to present that opinion or approach before a public forum. It is the opinion that caused the industrial association, not vice versa. We must be careful about which came first."

Steve Lamm

Consultants in Epidemiology and Occupational Health

WORLD CONGRESS OF EPIDEMIOLOGY 2024



Theme: Epidemiology and complexity - challenges and responses

All abstract submissions open: 1 October 2023								
Fast track submission deadline:	Fast track dispositions:							
1 December 2023	8 January 2024							
General submission deadline:	General dispositions:							
16 February 2024	25 March 2024							
Late-breaker submission deadline:	Late-breaker dispositions:							
1 May 2024	24 May 2024							















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Epi Crossword Puzzle – March 2024 Descriptive Epidemiology

Our crossword puzzle was created by Dr. Richard Dicker—A former CDC employee and not-quite-retired epidemiologist. For an online version go to: https://tinyurl.com/439nrcbp

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44					45				46					
47			48	49		50		51		52				
			53		54			55	56					
	57	58				59	60					61	62	
63					64						65			66
67					68						69			
70					71						72			

Across

- 1. Hold
- 5. HIV activist org. founded in 1987
- 10. It killed several thousand Londoners in December 1952
- 14. Tuesday food
- 15. First word of many limericks
- 16. Cribbage pieces
- 17. Greek H's
- 18. Gas used in 1995 Tokyo Metro attack
- 19. Length x width, or pi x r-squared
- **20.** Figure for displaying first component of 40-Across of an outbreak
- **23.** Snare
- 24. Suffix for Japan or Vietnam
- 25. ad / bc, for example
- 28. Advanced deg. from HSPH Dept. of Epi, for one
- 31. 23rd is a famous one
- 35. Aircraft control surface, or misspelling of preteen year
- **37.** Mo. without a federal holiday
- 39. Fair-hiring inits.
- 40. Components of descriptive epidemiology
- 44. Unit at the gym
- 45. Deg. that many epidemiologists have
- **46.** Current overdose crisis
- 47. Date of ____, used for X-axis of 20-Across
- **50.** "A mouse!"
- **52.** March 14 is the day for a piece ____
- **53.** Mouse's place
- **55.** "Livin' La Vida ___"
- **57.** Figure for displaying second component of 40-Across
- 63. Singing weather, per Gene Kelly
- **64.** Possible figure for third component of 40-Across
- **65.** +
- 67. A deadly sin
- **68.** ____ *Potente Potions*, book used by Hermione Granger
- 69. Tiny amount
- **70.** Adjudge
- 71. Cillian Murphy, for one
- 72. Their logo is a basketball with a B on it

Down

- 1. Pioneer cell phone co.
- **2.** Measure that can be calculated from cohort studies, but not most case-control studies
- 3. Global health org. based at Columbia U.
- 4. Among measures of validity, word after true or false
- **5.** Away from port
- **6.** Gates-funded program in several LMICs to assess childhood causes of death
- 7. Actress Garr or Hatcher
- 8. Acid related to gout
- 9. VP after Biden
- 10. Good but not best bowling scores
- 11. Jeopardy's founder, to his friends
- 12. Arch type
- 13. Fed. construction overseer
- **21.** Sas
- 22. Quality assurance letters in a medicine cabinet
- **25.** Back in style
- **26.** ET, e.g.
- 27. Fill-in workers
- 29. Apt rhyme for "stash"
- **30.** Owed
- 32. "The Boy Who Cried Wolf" writer
- **33.** Sainted 7th-century pope
- 34. Paris newspaper, with "Le"
- 36. Org. behind PubMed
- **38.** Fed. printing agency
- 41. Donkey Kong, for one
- 42. Historical period
- 43. TB med that may turn urine orange
- 48. Tommy John surgery or Apgar score
- 49. Toni Morrison's "___ Baby"
- **51.** Thief, in brief
- **54.** Inflexible belief
- **56.** On a questionnaire, word before "(specify)"
- 57. Chaplin prop
- 58. Busy place
- 59. Task step in 66-Down
- 60. Editor of A Dictionary of Epidemiology editions 1-4
- 61. Skin lotion ingredient
- 62. Short shot
- 63. Litmus color for strong acid
- 66. STATA competitor

What We're Reading This Month

Editor's Note: All of us are confronted with more material than we can possibly hope to digest each month. However, that doesn't mean that we should miss some of the articles that appear in the public media on topics of interest to the epi community. The EpiMonitor curates a monthly list of some of the best articles we've encountered in the past month. See something you think others would like to read? Please **send** us a link at info@epimonitor.net and we'll include it in the next month.

Public Health Topics

- Establishment and launch of global field epidemiology partnership aims to strengthen public health workforce and enhance global health security (CDC) https://tinyurl.com/33hnavrx
- How I'm building links between epidemiology and the health community (Columbia) https://tinyurl.com/47kfke7a
- Epidemiology studies still use outdated practices when considering race (UNC) https://tinyurl.com/ux4zvhv4
- WHO: Enhance field epidemiology workforce in South-East Asia Region (WHO) https://tinyurl.com/muyu9scn
- Doctors warn of a sepsis crisis that's killing one American every 90 seconds (Daily Mail) https://tinyurl.com/afsc3rvu
- Kate Middleton's cancer diagnosis is part of a frightening trend (Vox) https://tinyurl.com/27hern8r
- ChatGPT scandal rocks the scientific world (Daily Mail) https://tinyurl.com/2jj2c56z
- Here are the viruses to worry about right now (Time Magazine) https://tinyurl.com/mr427sun
- A pill that kills ticks is a promising new weapon against Lyme Disease (Wired Magazine) https://tinyurl.com/4mtu97he

What We're Reading This Month - con't from page 20

Public Health Topics, cont.

- The tropical disease that's suddenly everywhere (Vox) <u>https://tinyurl.com/yxyjdrwj</u>
- US Measles cases in 2024 already outnumber those in the entirety of 2023 (CBS News)
 https://tinyurl.com/3f9zb8wy
- America's deadly tap water problem (Daily Mail) https://tinyurl.com/54tttd9f
- How the anti-vaccine movement pits parental rights against public health (KFF Health) https://tinyurl.com/2e98h38m
- Mystery rise in infection with 30% fatality rate sweeps Japan (Newsweek) https://tinyurl.com/up4cpaa5

COVID-19

- The COVID lesson from Sweden: Don't lock down (Wiley Publishing) https://tinyurl.com/3mkjknrf
- German patient vaccinated against COVID 217 times (BBC News)
 https://tinyurl.com/3jer5rb6
- Scientists may have discovered what causes long COVID brain fog here's why it matters (Prevention Magazine)

https://tinyurl.com/3ra79fwf

Join EpiMonitor on our Facebook page at: https://bit.ly/2U29gUA

or on Twitter at: @theEpimonitor

or on Instagram at: @epimonitor

Notes on People

Do you have news about yourself, a colleague, or a student?

Please help The Epidemiology Monitor keep the community informed by sending relevant news to us at this address for inclusion in our next issue. people@epimonitor.net



Honored: Johns Hopkins Bloomberg School of Public Health associate professor in the Department of Biostatistics, **Abhirup Datta**, **PhD**, , was named a 2024 Emerging Leader in Statistics by the Committee of Presidents of Statistical Societies (COPSS). Datta was awarded the honor for his contributions to geospatial statistics and machine learning, for leading the development and application of Bayesian methods for improving mortality estimates in low- and middle-income countries, for prolific open-access software development, and for being a role model in advising and mentoring students as well as junior colleagues.



Honored: Emily Hector, assistant professor in the Department of Statistics at NC State, has received a Faculty Early Career Development Award from the National Science Foundation (NSF). The award, also known as the NSF CAREER award, is one of the highest awards the foundation gives to young faculty in the sciences. The five-year award will support Hector's research project entitled "New data integration approaches for efficient and robust meta-estimation, model fusion and transfer learning." The research aims to develop new methods for combining information from multiple datasets that have the potential to improve the robustness and generalizability of scientific findings.



Honored: Yangjianchen Xu and **Justin DeMonte**, biostatistics doctoral students at the UNC Gillings School of Global Public Health, were among only 20 selected recipients for the Distinguished Student Paper Award. The award is presented by the Eastern North America Region (ENAR) of the International Biometric Society.



Xu was selected for his paper titled "Proportional Rates Models for Multivariate Panel Count Data." He helped to propose a model that relates risk factors to recurrent events to analyze data to estimate the effects of risk factors on recurrent events under the constraints that the exact time a disease occurs is never observed.

DeMonte was selected for his paper titled "Assessing COVID-19 vaccine effectiveness in observational studies via nested trial emulation." The paper illustrates how nested trial emulation can be applied to estimate vaccine effectiveness that may vary over time since vaccination and calendar time.

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Passed: The former dean of the Harvard School of Public Health, **Howard H. Hiatt**, a physician, scientist and academic who reshaped the field of public health, steering it away from the narrow study of infectious diseases toward big-picture issues of fiscal and societal accountability in medicine, died on March 2nd at his home in Cambridge, MA at the age of 98. Harvard Public Health, a magazine published by the Harvard School of Public Health, where Dr. Hiatt was dean for 12 years, wrote in 2013 that Dr. Hiatt "made public health the conscience of medicine." https://tinyurl.com/bdha4xh2



Passed: The International Agency for Research on Cancer (IARC) is saddened by the passing of Professor **Jürgen Wahrendorf**, who died on 15 March 2024 at age 75 years. He was a pioneer of cancer epidemiology in Germany. He was appointed chair and professor of the epidemiology unit at the German Cancer Research Center (DKFZ) in Heidelberg, Germany, in 1986 and remained in that position until his retirement in 2013. A mathematician by background, he was attracted to cancer epidemiology during his first position in the Unit of Biostatistics at DKFZ and while working at IARC for 6 years in the Unit of Biostatistics and Field Studies (from April 1980 to March 1986) before he returned to DKFZ. https://tinyurl.com/2cystubv



Fired: Infectious-disease epidemiologist and biostatistician **Martin Kulldorff** is no longer a professor at Harvard Medical School after refusing the COVID vaccine because he had infection-acquired immunity. He is a member of the US Food and Drug Administration's Drug Safety and Risk Management Advisory Committee and a former member of the Vaccine Safety Subgroup of the Advisory Committee on Immunization Practices at the US Centers for Disease Control and Prevention.

In 2020, Kulldorff was a co-author of the Great Barrington Declaration. The declaration was widely rejected, and was criticized as being unethical and infeasible by Tedros Adhanom Ghebreyesus, the director-general of the World Health Organization.

Near Term Epidemiology Event Calendar

Every December The Epidemiology Monitor dedicates that issue to a calendar of events for the upcoming year. However that often means we don't have full information for events later in the upcoming year. Thus an online copy exists on our website that is updated regularly. To view the full year please go to: http://www.epimonitor.net/Events The events that we are aware of for the next month follow below.

April 2024

April 2-4 https://bit.ly/3G1mAn4

Short Course: Mendelian Randomisation / Erasmus MC / Virtual

April 2-4 https://bit.ly/3HFdFJd

Conference: 2024 World Vaccine Congress / Multiple Sponsors / Washington, DC

April 3-5 https://tinyurl.com/pzyk3pp4

Meeting: 2024 Annual Oregon Epidemiologists' Meeting / Oregon Health Authority / Sunriver, OR

April 4 https://tinyurl.com/yckh6h9c

Meeting: 10th Annual NYC Epidemiology Forum / Multiple Sponsors / New York City, NY

April 5-10 https://tinyurl.com/mvjydryn

Conference: 2023 Annual Meeting - American Assn for Cancer Research / ACCR / San Diego, CA

April 10-12 https://tinyurl.com/5b4t8b8b

Short Course: Introduction to Bayesian Statistics / EpidM / Amsterdam, The Netherlands

April 14-16 https://tinyurl.com/bdzmtjmb

Conference: Annual Mid-Year ISPE Conference / ISPE / Orlando, FL

April 15-19 http://tinyurl.com/4kzuxcys

Short Course: Psychiatric Epidemiology / Erasmus MC / Virtual

April 16-19 https://bit.ly/3BHalUI

Conference: SHEA (Society for Healthcare Epidemiology of America) Spring 2022 / SHEA / Houston, TX

April 17-20 https://tinyurl.com/2wrxk9fr

Conference: 2024 Annual Conference - Population Association of America / PAA / Columbus, OH

April 18-21 https://tinyurl.com/3hkwat26

Conference: Preventive Medicine 2024 / American College of Preventive Medicine / Washington, DC

April 22-24 https://tinyurl.com/5hc6875d

Conference: 2nd International Conference on Vaccine Research & Development/ Pangea Global Events / Munich, Germany

April 22-24 https://tinyurl.com/6ka7wvuj

Conference: Joint Meeting ADAM / European Dermato-Epi Network / EDEN / Paris, France

April 22-26 http://tinyurl.com/3z8s2w4e

Short Course: Understanding Trusted Research Environments / University of Bristol / Virtual

April 2024 continued

April 23-24 https://tinyurl.com/bdddyss6

Conference: 2024 FETP International Nights (in conjunction with the EIS Conference) / CDC / Atlanta, GA

April 23-25 https://bit.ly/3WuSZrQ

Conference: Public Health 2024 / Canadian Public Health Association / Halifax, Nova Scotia, Canada

April 23-26 http://bit.ly/38nmB26

Conference: 71st Annual Epidemic Intelligence Service Conference / CDC / Atlanta, GA

April 24-26 https://bit.ly/3PBbiJv

Short Course: Competing Risks and Multi-State Models / Erasmus MC / Rotterdam, The Netherlands

April 25-27 http://bit.ly/3alftGJ

Conference: 2021 Global Conference on Health and Climate Change / ICCH / Montreal, Canada

April 25-28 https://bit.ly/3oLZ2Kz

Conference: NACCHO Preparedness Summit 2023 / Multiple Sponsors / Cleveland, OH

April 28-30 https://tinyurl.com/bddezfxu

Conference: Health Effects Institute Annual Conference 2024 / HEI / Philadelphia, PA

April TBD http://tinyurl.com/5xnnsznd

Short Course: Science Communication / Erasmus MC / Rotterdam, The Netherlands

May 2024

May 1-3 https://tinyurl.com/bhzrp9t7

Conference: 2024 Public Health Partnership Conference / NY State Public Health Assn / Saratoga Springs, NY

May 1-3 https://tinyurl.com/pn2ezfju

Conference: STATGEN 2024: Conference on Statistics in Genomics and Genetics / American Statistical Association /

Pittsburgh, PA

May 1-3 https://bit.ly/3s6nOXC

Short Course: Epigenetic Epidemiology / University of Bristol / Virtual

May 1-3 http://tinyurl.com/mvbrbtew

Short Course: Molecular Epidemiology / University of Bristol / Virtual

May 2-4 https://tinyurl.com/2p9hr2j6

Conference: EpiCause 2024 - Causality in Epidemiology / Johannes Kepler University of Linz / Linz, Austria

May 8-10 https://tinyurl.com/4f8f6w8k

Conference: 2023 Annual Conference on Vaccinology Research / National Foundation for Infectious Diseases / Virtual

May 9-10 https://tinyurl.com/zsyycmeb

Short Course: Analysis of Repeated Measures / University of Bristol / Virtual

May 13-15 https://bit.ly/2C4g1PE

Short Course: Quality of Life Measurement / Erasmus MC / Rotterdam, The Netherlands

May 2024 continued

May 13-17 http://tinyurl.com/3y8ejd74

Short Course: Designing and Conducting Pragmatic Randomised Controlled Trials / University of Bristol / Virtual

May 13-31 http://bit.ly/2P1VUrR

Summer Program: Summer Public Health / University of Minnesota / Minneapolis, MN

May 14-17 http://bit.ly/2DXzS3d

Conference: INTEREST 2024 / IeDE (Intl Epi Databases to Evaluate AIS) / Cotonou, Benin

May 15-17 https://tinyurl.com/4en4yu7u

Conference: Brain Tumor Epidemiology Consortium Conference / BTEC / Mainz, Germany

May 16-18 https://bit.ly/3Fz1F9t

Conference: Accelerating Health Equity / Multiple / Kansas City, KS

May 19-22 https://bit.ly/3FBbwf3

Conference: 45th Annual Meeting / Society for Clinical Trials / Boston, MA

March 11-13 https://tinyurl.com/34x5tnn5

Conference: Teaching Prevention 2024 / Assn for Prevention Teaching & Research / Alexandria, VA

May 20-22 https://tinyurl.com/mr2j64tm

Conference: Global Summit on Public Health and Preventive Medicine (GSPHPM2024) / The Scientistt / Prague, Czech

Republic

May 20-24 http://tinyurl.com/4xwhe3y9

Short Course: Introduction to Qualitative Research Methods / University of Bristol / Virtual

May 20 – June 9 https://tinyurl.com/22rpunzb

Short Course: Health Diplomacy Training Institute / Georgetown University / Washington, DC

May 21 – June 14 http://bit.ly/38mW6tl

Summer Program: Summer Institutes in Global Health / McGill University / Montreal, Canada & Virtual

May 22-24 http://tinyurl.com/mpthtun8

Short Course: Human Immunology - Genes and Environment / Wellcome Connecting Science / Hybrid

May 27 – June 1 https://bit.ly/321Yo2B

Conference: 77th World Health Assembly / WHO / Geneva, Switzerland

May 27 – June 7 https://bit.ly/3YwW6kG

Short Course: Missing Values in Clinical Research / Erasmus MC / Rotterdam, The Netherlands

May 27-31 https://tinyurl.com/mr24u6sd

Conference: 46th Annual Kettil Brunn Society Meeting / Kettil Brunn Society / Fremantle - Walyalup, Western Australia

May 28-31 https://tinyurl.com/44hhdtwh

Conference: 2024 Annual Conference / Society for Prevention Research / Washington, DC

May 29 – June 7 http://tinyurl.com/4wkbwcu3

Short Course: Sustainable Public Health / Erasmus MC / Rotterdam, The Netherlands

May 2024 continued

May 30 – June 1 https://bit.ly/3IO7yAC

Short Course: Child Psychiatric Epidemiology / Erasmus MC / Virtual

May TBD http://tinyurl.com/39r4cwmy

Short Course: Networking & Influencing Skills / Erasmus MC / Rotterdam, The Netherlands



JULY 8-26 2024 59th University of Michigan Summer Session in Epidemiology FULLY ONLINE | One- or three-week courses Distinguished faculty | Continuing Medical Education credit available



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The Division has a diverse range of NIH funded projects and faculty mentors—to see the full range, consult our website.

Postdoc positions are partially funded by a T32 grant (T32CA190194) from the NCI, with annual stipend starting at \$53,760, depending on experience, for up to 3 years.

Support for tuition, books, software, conference travel, and research is available.

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- · Cancer Disparities and Health Equity
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- · Cancer Epidemiology
- Implementation Science
- Shared Decision Making
- · Social Determinants of Health









Eligibility and Application Instructions

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We particularly welcome applications from first generation college graduates and other backgrounds underrepresented in biomedical sciences. Washington University School of Medicine is an equal opportunity employer.

Send inquiries to: Dr. Aimee James and Dr. Graham Colditz, Training Directors, at aimeejames@wustl.edu

To apply: send an application, cover letter, curriculum vitae, and professional reference list by email to PIISpostdoc@wustl.edu. Applications are considered on a rolling basis.

To learn more about the Division and our faculty, please visit: https://publichealthsciences.wustl.edu/
Division of Public Health Sciences | 600 S. Taylor Avenue, 2nd Floor | St. Louis, MO 63110 | (314) 454-7940

JUNE 1 – JUNE 30 SUMMER 2024



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The Epidemiology Monitor ISSN (2833-1710) is published monthly

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